REMARKS

This application has been carefully reviewed in light of the Office Action dated December 5, 2003 (Paper No. 4). Claims 1 to 9 are in the application, of which Claims 1, 5 and 9, the independent claims herein, have been amended. Reconsideration and further examination are respectfully requested.

Claims 1 to 9 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,615,318 (Matsuura). Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention relates to detecting three-dimensional position coordinates of an indicating tool, where the indicating tool is used in combination with a display for displaying a window based on two-dimensional coordinates. The present invention utilizes a stored set of coordinate values that define a coordinate input area in arbitrary space. The present invention determines if the three-dimensional position coordinates of the indicating tool belong to the coordinated values stored as the coordinate input area. If so, the present invention converts two of the three-dimensional coordinates of the indicating tool into a two-dimensional coordinate that is displayed on a window of a screen. In this way, the present invention can realize coordinate input operation from an arbitrary space.

With specific reference to the claims, amended independent Claim 1 recites a coordinate input apparatus which detects three-dimensional position coordinates of an indicating tool used in combination with a display for displaying a window based on two-dimensional coordinates. The apparatus comprises storage means for storing a set of

coordinate values of a plurality of points for defining a coordinate input area in an arbitrary space, determination means for determining whether a three-dimensional coordinate value as position coordinates of the indicating tool belongs to the coordinate input area defined by the set of coordinate values stored in the storage means, and conversion means for converting two of the three-dimensional coordinates of the indicating tool into a two-dimensional coordinate value corresponding to two-dimensional coordinates displayed at the window of the display on the basis of the determination result obtained by the determination means.

Amended independent Claims 5 and 9 are method and computer-readable memory claims, respectively, that correspond generally to the apparatus of amended independent Claim 1.

The applied art is not seen to disclose or suggest the features of amended independent Claims 1, 5 and 9, and in particular, is not seen to disclose or suggest at least the features of storing a set of coordinate values of a plurality of points for defining a coordinate input area in an arbitrary space, determining whether a three-dimensional coordinate value as position coordinates of an indicating tool belongs to the coordinate input area defined by the set of coordinate values stored in the storage means, and converting two of the three-dimensional coordinates of the indicating tool into a two-dimensional coordinate value corresponding to two-dimensional coordinates displayed at the window of the display on the basis of the determination result.

Matsuura relates to a method and apparatus of visualizing assembled sewing patterns. Matsuura is seen to teach an input means 1100 for inputting three-dimensional

coordinate values of circumference of each horizontal cross section of a dress (column 6, lines 6-8; Fig. 1). Calculation means 1200 of Matsuura calculates, based on the output of the input means 1100, the three-dimensional coordinate value that represents the shape formed by assembling sewing patterns (column 6, lines 14-26; Fig. 1). Image processing means 1300 then generates, from the output of calculation means 1200, a two-dimensional projection image associated with the shape formed by assembling sewing patterns (column 6, lines 27-31; Fig. 1). The two-dimensional projection image is displayed on display means 1400 (column 6, lines 32-34; Fig. 1).

The Office Action contends that Matsuura's image processing means 1300 corresponds to the determination means of the present invention. However, as noted above, Matsuura's image processing means 1300 is seen to teach generating a two-dimensional projection image associated with the shape formed by assembling sewing patterns from the output of calculation means 1200. There is nothing in Matsuura that is seen to teach or suggest that image processing means 1300 can determine if three-dimensional position values of an indicating tool belong to an arbitrary coordinate input area that has been stored. Rather, the image processing means 1300 are seen to simply generate a two-dimensional projection image.

In addition, the Office Action contends that calculation means 1200 of Matsuura corresponds to the conversion means of the present invention. However, the calculation means 1200 is not in any way seen to teach converting two of the three-dimensional coordinates of an indicating tool into a two-dimensional coordinate value

corresponding to two-dimensional coordinates displayed at the window of a display on the basis of a determination result

As such, Matsuura is not seen to teach or suggest the features of storing a set of coordinate values of a plurality of points for defining a coordinate input area in an arbitrary space, determining whether a three-dimensional coordinate value as position coordinates of an indicating tool belongs to the coordinate input area defined by the set of coordinate values stored in the storage means, and converting two of the three-dimensional coordinates of the indicating tool into a two-dimensional coordinate value corresponding to two-dimensional coordinates displayed at the window of the display on the basis of the determination result.

Accordingly, based on the foregoing amendments and remarks, amended independent Claims 1, 5 and 9 are believed to be allowable over the applied references.

The other claims in the application are each dependent from the independent claims and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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